

WIRELESS HILL BEACON

Delaware Valley Radio Association



OFFICERS

President

D. Norcross, K2DRN

Vice President

M. Moreken, AB2IO

Secretary

J. Sundra, W3ZLP (SK)

Treasurer

R. Kubinski, KC2PQC

DIRECTORS

Membership

L. Weight, KC2MTO

Radio Station

M. Juza, KC2TGM

Repeater Operations

R. Schroeder, N2HX

Physical Plant

H. Gold, AB2VG

D. Norcross, K2DRN (asst.)

Public Information

T. Reeg, K2TFR

Training & Examinations

D. Wright, AA2F

Publications

A. Flinsch, AB2RC

Programs

G. Wilson, K2GW

Immediate Past President

N. Perez, NY8N

Web Service

N. Perez, NY8N

Hamfests

N. Perez, NY8N

Meeting – December 9th 2013

The regular monthly meeting will be held at 7:30 PM on Wednesday, December 9th, at Our Lady of Good Counsel Church, on Upper Ferry Road at Wilburtha Road in West Trenton. The site is easy to reach from I-95 or NJ-29. Talk-in is available on the 146.67 (PL 131.8) and 442.65 repeaters. The directors meeting is 1 hour earlier at the club shack.

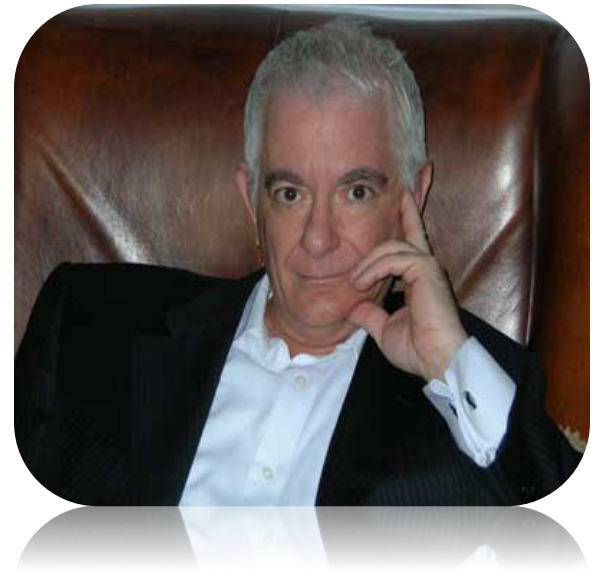
Meeting Minutes

None received.

BALANCED LINES 2013 Installment 1
by Bob Schroeder, N2HX
© 2013

THE BROADBAND BOONDOGGLE- ANOTHER FEDERAL FOLLY

In the months that followed the attacks of September 11, 2001, a number of independent critiques were performed to study the communications failures that occurred on and around the scene. With much of the metropolitan area's radio infrastructure destroyed or without power, the most prevalent problem was that agencies could not talk to their field teams, different agencies could not talk among each other, and support agencies from other states could not talk to the incident commander(s) at Ground Zero or at the command post staging area at Liberty Park. A new buzzword, *interoperability*, was coined to describe this communications matrix of who should be able to talk to whom. Subsequent to the Patriot Act and other governmental rulings, communications interoperability, as it came to be known, became the battle cry that promised to solve every communications issue. If you were writing a proposal to get a federal grant to help fund your communications project, the mere inclusion of the term "communications interoperability" would guarantee you a front row ticket to feed from the public trough.



As with the Y2K non-event, the events of 9-11 spawned all kinds of pop-up consulting companies run by communications "experts", all of them promising to deliver bleeding-edge technology that would solve your communications interoperability problems. Federal and state governments hired many of these so-called "Beltway bandits" because these entities did not have their own in-house communications talent. Much to the chagrin of these government agencies, not to mention us taxpayers, lots of emerging technology was promised, but little if any of it actually came to market. That's when the term "vaporware" was coined.

That was then; this is now. Nothing much has improved since 9-11, apparently. Despite the big push to improve interoperability and disaster survivability, there is little to show for it in the wake of hurricane Sandy. (I should point out here that the miserably over-used phrase "Super Storm" Sandy is being used for a reason. Even though hurricane Sandy was a Category 1 storm when it slammed into New Jersey, authorities are referring to it as a "super storm" because it embraces those victims who do not have hurricane insurance. This enables more people to become eligible for FEMA relief.)

An alarming article in the December 6, 2012 edition of *The New York Times* revealed that NYPD and other city agencies suffered major communications failures during the Sandy disaster. What surprised me was that these points of failure were exactly the same as the 9-11 event, according to the article. According to Charles F. Dowd, deputy chief for NYPD's communications division, emergency officials who arrived on scene to assist with the Sandy disaster could not talk to any of the city units. As the former communications and warning officer for New Jersey OEM, I have to say that this failure is inexcusable.

Nobody knows more about the use of VHF and UHF simplex and repeater operations than Amateur Radio operators. No matter what class license we hold, we all learned how the FM mode behaves- things like "capture effect" and "talkaround". It isn't common knowledge outside of the law enforcement and emergency management profession, but these basic modes that we hams use every day are still available in the law and public safety realm. The Statewide Police Emergency Network (SPEN) is a nationwide program that uses four VHF simplex frequencies and a single CTCSS tone. The SPEN plan, established in the 1970s, is as old of the hills, yet it is still viable today. Why wasn't it used during this emergency? In the mid-1980s, NPSPAC, an emergency management version of SPEN, was created to provide nationwide interoperability for emergency responders. After a commercial airliner skidded off an ice-covered runway in Washington, DC, it was discovered that police and emergency responders from different districts could not communicate with each other on-scene. The FCC in conjunction with FEMA formed the National Public Safety Planning Advisory Committee (NPSPAC) to come up with a solution. The committee came up with five pairs of 800 MHz. frequencies that would be used in a conventional (i.e. non-trunked) mode. These five repeater channels would be established as a national standard. Like the SPEN frequencies, the NPSPAC channels, labeled National Calling, Tac 1, 2, 3, and 4, could be used by any eligible agency across the United States. If there was no existing NPSPAC repeater in a given disaster area, emergency responders from different localities could utilize the simplex or "talkaround" mode on their portable or mobile radio to contact each other. In the Amateur Radio world, an example of our interoperability would be the national simplex frequencies of 146.520, 146.580, 145.555, and so on. The standardization of amateur repeater channels and the existence of print and online repeater directories make it easy to arrive in any given area and communicate with the local hams. In the digital world, packet and APRS have their own standard frequencies, too. What's more, it doesn't matter which brand or model radio you have. So if hams can communicate with each other anywhere in the country, why can't police and emergency responders?

Returning to the *Times* article, Dowd goes on to comment that any communications system that uses such fragile infrastructure as the Internet or the cellular network or some proprietary link system simply will not work during a major disaster. Cell sites can and do become inoperable very easily, even from simple overload caused by overanxious subscribers. The earthquake of August 23, 2011 is a classic example of a cell system crash. That said, why didn't the

city of New York revert to the old existing radio systems that were available? The article didn't say, and officials will probably never disclose the reason. Unlike proprietary trunked and broadband radio systems, SPEN and NPSPAC can be utilized using any brand of two-way radio. Both being analog systems, there are no digital or encryption obstacles that would inhibit one agency from talking to another agency. Although it would be illegal to do so because of FCC type acceptance reasons, in a pinch you could even use an "opened up" ham radio transceiver to talk on SPEN or NPSPAC. What's more, why does an emergency worker need to talk through a trunking or broadband system to speak with another worker a few feet away? The capture effect of FM simplex would enable several people to use the same frequency if they were sufficiently far apart.

According to the *Times* article as well as my own contacts, the allure of broadband is that it not only facilitates talking, it also supports the transmission of images and document files. This is all very nice when it works. However, what good is it if personnel can't even talk to each other? The figure of \$5 billion of FCC funding is mentioned in the article. The revenue would come from frequency auctioning, the Commission's principle moneymaker. DHS has formed a new group called FirstNet to study how best to use these new frequencies and the technology that goes with them. In my opinion, I see yet another waste of money on the horizon.

In spite of broadband, ad hoc networks, and all the other glitzy bells and whistles that the Big Boys of land-mobile are touting, you and I both know that these systems will likely fail in a disaster. Part of the problem is that the vendors easily impress government agencies. Politicians, police chiefs, and budget managers become mesmerized and are deluded into thinking that "bigger (and more complex) is better". Simplex and conventional repeaters are old fashioned, they say. Well, we'll see about that!

VINTAGE AMATEUR RADIO PROMO FILM

Thanks to Bob, WB2F, for sending me this link to a YouTube video. It's in black and white, so don't try to adjust your computer monitor! Go here:

<https://www.youtube.com/watch?v=SyWIJPNLPf8>

All for now.

Comments invited.

Bob Schroeder, N2HX
Past President, DVRA

DVRA Nets

2-meter & 70-cm nets on the club repeaters 146.670 pl 131.8, 442.650 pl 131.8

2-Meter Nets:

The Pepper Net 10:00 PM Daily

Mercer Co. Emergency Net 7:30 PM Tuesdays KB2EGI, coordinator.

70-cmNets:

The Pepper Net 9:00 PM Daily

Training & Upgrade Classes

Don Wright, AA2F, periodically holds Technician and General classes.

Classes are held at various locations. Call Don at 609-737-1723 to register.

Logbook of The World

Mike AB2IO reports that the current W2ZQ LOTW stats

As of: 12/27/2012

of QSOs 16,555

of LOTW QSLs 5,099

Latest QSL matches 12/27/2012

RD3DT	2009-03-08	13:42:54	20M	SSB	14.18660	EUROPEAN	RUSSIA
RD3DT	2008-02-17	14:02:26	20M	CW	14.02055	EUROPEAN	RUSSIA
RD3DT	2007-02-17	13:28:32	20M	CW	14.016	EUROPEAN	RUSSIA
EA3DUM	2006-10-29	16:15:14	15M	SSB	21.352	SPAIN	
WA2MCR	2006-06-25	04:53:59	80M	SSB	3.500	UNITED STATES OF AMERICA	

Fame and Fortune Await

Want to become rich & famous – write an article for the DVRA Beacon. Fame among local hams almost guaranteed – fortune is up to you (and your luck in Powerball). Deadline for submission is one week before the monthly meeting (that would make the deadline the first Wednesday of the month). For details contact Alex / AB2RC – ab2rc@ab2rc.net